

It is the intent that the Tennessee Bureau of Investigation (TBI) to purchase 1 [one] Mobile Command Post as outlined in these specifications and requirements.

SCOPE

1. The manufacturer must carry a minimum of \$10 million aggregate product liability insurance. Proof of policy shall be submitted at final submittal.
2. Due to the complexity of the conversion, vendors must provide detailed specifications. A general statement or letter stating that the vendor meets all specifications will not be acceptable. Additionally, photo copies of this specification will not be an accepted response.
3. To insure the TBI a source of service and parts over the anticipated life of the Mobile Command Post, potential vendors must have established a permanency in the industry for a minimum of twenty (20) years.
4. The manufacture must be ISO 9001:2008 certified and must include a copy of their certification certificate at the time of the submission of the bid. No Exceptions.
5. Vendor must stock a complete line of special service equipment and parts for this Mobile Command Post.
6. The ability to have the Mobile Command Post fully operational in a minimum amount of time is of utmost importance to TBI, therefore an integrated vehicle automation system is required. The vehicle automation system must include an auto set up mode that will enable the command center to be fully deployed in no more than ten minutes time by a single operator. This includes but is not limited to: generator startup, interior and exterior lighting powered on, HVAC systems powered on, audio/video systems powered on, slide outs deployed, leveling system deployed, battery charging system powered on, and awning extended. Complete details for the vehicle automation system are listed throughout the specifications.
7. This coach type command post cannot be a prototype and/or demonstrator vehicle. The vehicle(s) must be either current or next year's model.
8. Brand names are used to establish minimum standards or quality reference, in most cases quality equivalent or better substitutions may be approved with the submission of specifications. TBI reserves the right to insist on specific make and models, or newer, of any item listed herein

Drawings – Bid and Pre-Construction

In order to fairly evaluate each vendor's technical ability and design capability, blueprints are to be provided. All prints submitted will be on the same size paper and to the same scale. The drawings are to be on "D" size paper, 24" x 36" in size, all views must be on 1/2" = 12" scale. CAD prints are preferred. Views Required:

Bid Drawings

1. Floorplan (overhead) with slide outs extended- to be submitted with bid proposal

Pre-Construction Drawings

2. Floorplan (overhead) with slide outs retracted.
3. Driver side interior
4. Passenger side interior
5. Rear wall interior
6. Driver side exterior
7. Passenger side exterior
8. Front view exterior
9. Rear view exterior
10. Roof view exterior

DIMENSIONS

- Overall Length minimum 44'. Per TCA Section 55, the vehicle body must not exceed 45' in length and 8'6" in width. This limitation does not include exterior mounted components to include cameras, masts, mirrors, lights, etc.

SPECIFICATIONS

Unit to contain all equipment advertised as standard by the manufacturer to include the following required options listed below:

General Requirement

1. EXPECTED FRONT AXLE(S) LOAD : 16,000.0 lbs
2. EXPECTED REAR DRIVE AXLE(S) LOAD : 20000.0 lbs
3. EXPECTED TAG AXLE(S) LOAD : 10000.0 lbs
4. EXPECTED GROSS VEHICLE WEIGHT CAPACITY : 45660.0 lbs
5. LH PRIMARY STEERING LOCATION
6. SET-BACK FRONT AXLE CHASSIS

Engine

1. CUMMINS ISL 450 HP @ 2100 RPM; 2200 GOV RPM, 1250 LB/FT @ 1400 RPM, REC/FIRE/EMERGENCY
2. 85 MPH ROAD SPEED LIMIT
3. CRUISE CONTROL SPEED LIMIT 75 MPH MAX ALLOWED
4. PTO MODE ENGINE RPM LIMIT - 2300 RPM
5. PTO MODE BRAKE OVERRIDE - SERVICE BRAKE ONLY ENABLED
6. PTO RPM W/CRUISE SET SW - 1200 RPM
7. PTO RPM WITH CRUISE RESUME SWITCH - 1000 RPM
8. PTO MODE CANCEL VEHICLE SPEED - 0 MPH
9. PTO GOVERNOR RAMP RATE - 200 RPM PER SECOND
10. ENG BRK W/CC ENABLED AT 3 MPH ABOVE SET SPEED, 2 MPH INC BTWN BRKG LVLS
11. PTO MINIMUM RPM - 700
12. REGEN INHIBIT SPEED THRESHOLD - 20 MPH
13. ALTERNATE SWITCH SPEED - 950 RPM
14. MAXIMUM ENGINE RPM = 2500 ON VSS FAILURE
15. TRANSMISSION VEHICLE INTERFACE CONNECTOR WIRED TO TRANSMISSION ECU
16. PKG 226 - 3K/4KHS/MH/PTS/TRV - 5TH GEN
17. ALLISON TRANS - SEM/LRTP REQ
18. TRANS PROG-ENABLED
19. 1,1,6 - LOW, START, HIGH GEARS -3K/4K PRIMARY GEARS
20. PSS -S1 PERFORMANCE - 3K/4KPRIMARY SHIFT SCHEDULE
21. SSS - S3 ECONOMY - 3K/4K SECONDARY SHIFT SCHEDULE
22. DSS, ARM, FS; DSS-DISABLED, ARM-DISABLED, FS-DISABLED
23. RANGE INDICATION, NEUT
24. 5TH GEN COMMON PUSH BUTTON ELEC SHIFTERW/REMOTE MTD ECU & SHIFTER MTG PLT

Engine Equipment

1. 1335 SQ-IN ALUMINUM REAR MTD REAR ENGINE RADIATOR
2. ENGINE OIL CHECK AND FILL
3. FARR ECOLITE AIR CLEANER WITH 6" INLET/OUTLET
4. AIR INTAKE WITH 60 INCH X 6 INCH ID FLEXIBLE DUCTING
5. AIR INTAKE PIPING - CLNR TO ENGINE
6. AIR CLEANER MTD HORIZONTAL LH SIDE WITH REAR INLET
7. 12X15.0 INCH AIR INTAKE BOX
8. LN 12V 240 AMP AVI 160 PAD MOUNT ALTERNATOR
9. (2) ALLIANCE MODEL 1131, GROUP 31, 12 VOLT MTCE FREE 1900 CCA THREADED STUD BATTERIES
10. TEMPORARY METAL PLATE FOR BATTERY(S), MOUNTED BETWEEN RAILS
11. SINGLE BATTERY BOX MOUNTED LESS THAN 2 METERS FROM FUSE/RELAY BRACKET
12. FRAME GROUND RETURN, 135 INCH BATTERY CABLES WITH EYELET CONNECTORS
13. CUMMINS 18.7 CFM AIR COMPRESSOR WITH INTERNAL SAFETY VALVE
14. ELECTRONIC ENGINE INTEGRAL SHUTDOWN PROTECTION SYSTEM
15. JACOBS COMPRESSION BRAKE
16. RETARDER CTRL WRG & EATON OFF/LOW/HIGH CTRL SWITCH
17. ENGINE ATD AUTO OVER THE ROAD REGEN & IN OPERATORS STATION REGEN REQUIRED CAP W/ELECT DEF GAUGE
18. HZ ATSA-OB
19. RH FRAME MOUNTED HORIZONTAL AFTER TREATMENT DEVICE
20. 13 GALLON DEF TANK RH FRAME MTD
21. HORIZONTAL SCR CATALYST
22. RH OB FRAME MTD HZ SCR CATALYST
23. EXHAUST MITIGATION DEVICE FTL 4" ID SLIP-FIT W/CHRM CVR SHIPPED IN PRYS BX

24. 12" FROM ATD X 90 DEG X 9.3" LONG - SIDE EXIT
25. HORTON ELECTRONICALLY CONTROLLED VISCOUS ON-OFF FAN CLUTCH
26. CUMMINS SPIN ON FUEL FILTER
27. COMBINATION FULL FLOW/BYPASS OIL FILTER
28. RADIATOR MOUNTED SURGE TANK
29. AIR RECIRCULATION SHIELD
30. ANTIFREEZE TO -34F
31. RUBBER/STEEL COOLANT LINES - REAR ENGINE
32. STANDARD CHARGE AIR COOLER PLUMBING
33. PHILLIPS-TEMRO 1000 WATT/115 VOLT BLOCK HEATER
34. 120VAC PLASTIC PLUG ENGINE HEATER CORD TEMPORARILY MOUNTED TO ENGINE, 6 FOOT
35. DELCO 12V 38MT HD STARTER WITH INTEGRATED MAGNETIC SWITCH

Transmission

1. ALLISON 3000 AUTOMATIC TRANSMISSION WITHOUT PTO PROVISION

Transmission Equipment

1. WATER TO OIL TRANSMISSION COOLER
2. TRANSMISSION OIL CHECK AND FILL WITH ELECTRONIC OIL LEVEL CHECK
3. SYNTHETIC TRANSMISSION FLUID (TES-295 COMPLIANT)

Front Axle & Equipment

1. ZF INDEPENDENT 16,000# SINGLE FRONT AXLE
2. NON-ASBESTOS FRONT BRAKE LINING
3. BENDIX ADB22X AIR DISC FRONT BRAKES
4. AIR DISC LONGSTROKE FRONT BRAKE CHAMBERS
5. FRONT AIR DISC BRAKE INTERNAL ADJUSTERS
6. FRONT DISC BRAKE ROTORS
7. BENDIX IRON FRONT HUBS
8. FRONT GREASE SEAL
9. UNVENTED FRONT HUB CAPS - GREASE
10. LITHIUM GREASE FRONT AXLE LUBRICANT
11. STANDARD SPINDLE NUTS FOR ALL AXLES
12. TIMKEN 454 SERIES CUPS AND CONES (WHEEL BEARINGS) REAR
13. ZFLS 8018 POWER STEERING WITH STEERING INPUT 12" FORWARD
14. TRW POWER STEERING PUMP
15. 1.6 QUART POWER STEERING RESERVOIR
16. STEERING SHAFT WITH JOINT BOOT
17. STEERING COLUMN FLOOR MOUNT BOOT

Front Suspension

1. 16,000# ZF RL80EM INDEPENDENT FRONT AIR SUSPENSION
2. SACHS FRONT SHOCK ABSORBERS
3. SINGLE FRONT AIR SUSPENSION LEVELING VALVE

Rear Axle & Equipment

1. DA-RS-21.0-4 21,000# R-SERIES SINGLE REAR AXLE
2. 4.78 REAR AXLE RATIO
3. IRON REAR AXLE CARRIER WITH STANDARD AXLE HOUSING
4. 1710 DANA SPICER MAIN DRIVELINE WITH HALF ROUND YOKES
5. ORGANIC SAE 80/90 REAR AXLE LUBE
6. MERITOR 16.5X7 Q+ CAST SPIDER CAM REAR BRAKES, DOUBLE ANCHOR, FAB'D SHOES
7. NON-ASBESTOS REAR BRAKE LINING
8. CHBR STD LOCATION
9. CONMET CAST IRON REAR BRAKE DRUMS
10. REAR OIL SEALS
11. NO DRIVELINE PARKING BRAKE
12. MGM TR 30/36 TAMPER PROOF 1-DRIVE AXLE SPRING PARKING CHAMBERS
13. MERITOR 5.5" HANDED AUTOMATIC REAR SLACK ADJUSTERS

Rear Suspension

1. 20,000# NEWAY ADL-123 REAR AIR SUSPENSION
2. NEWAY AD - 7.50" RIDE HEIGHT
3. AUTO DUMP VALVE FOR AIR SUSPENSION W/O INDICATOR LIGHT, W/O GAUGE
4. DUAL AIR REAR SUSPENSION LEVELING VALVES
5. SACHS REAR SHOCK ABSORBERS

Tag Axle & Equipment

1. INGERSOLL-IMT F22 10,000# DROP CENTER TAG AXLE
2. 48" AXLE SPACING PUSHER/TAG
3. MERITOR 15X5 Q+ CAM PUSHER/TAG BRAKES, DOUBLE ANCHOR, FBD SHOES
4. NEWAY NON-LIFTING CA-110 SERIES 10,000# TAG AXLE AIR SUSPENSION
5. SACHS PUSHER/TAG SHOCK ABSORBERS
6. LIFT AXLE WIRING AND CONTROL SWITCH

Brake System

1. AIR BRAKE PACKAGE
2. WABCO 6S/6M ABS WITH TRACTION CONTROL
3. REINFORCED NYLON, FABRIC BRAID & WIRE BRAID CHASSIS AIR LINES
4. FIBER BRAID BRAKE HOSES
5. FRONT AXLE QUICK RELEASE VALVE @ 1 PSICRACK PRESSURE
6. COMBO-ABS/SERVICE BRAKE VALVE WITH 4 PSI CRACK PRESSURE
7. WABCO SS-1200 PLUS AIR DRYER W/INTEGRAL AIR GOVERNOR AND HEATER
8. WABCO OIL COALESCING FILTER FOR AIR DRYER
9. (3) STEEL AIR RESERVOIRS - 2 MTD FWD & 1 MTD IN REAR - MOTORHOME/BUS ONLY
11. 750 CU. IN. AUXILIARY AIR TANK, PRESSURE PROTECTED SUPPLY
12. AUTO DRAIN VALVE AND (2) MANUAL DRAIN VALVES WITH PULL CORD
13. EXTERNAL CHARGING SCHRADER VALVE

Trailer Connections

1. WIRING TO ELECTRICAL CONNECTION END OF FRAME
1. 7-WAY AUTOMOTIVE STYLE TRAILER CABLE RECEPTACLE MOUNTED EOF

Wheelbase & Frame

1. 7150 MM (282 INCH) WHEELBASE 546 -1ANX_R-1/4"X2.75"X9.0" STL RSD(6.4 MMX 229MM 250"X9.0") 50 KSI W/LWRD RR SECT
2. 1/4" (6MM) C-CHANNEL INSERT AT REAR SUSPENSION ONLY
3. 3400MM (134 INCH) REAR FRAME OVERHANG
4. 12 INCH INTEGRAL FRONT FRAME EXTENSION
5. SQUARE END OF FRAME
6. FRAME MOUNTED BRACKETS FOR CUSTOMER FURNISHED TOW DEVICE RATED @ 10,000# FOR
7. REAR RADIATOR
8. FRONT CLOSING CROSSMEMBER
9. FRONT SUSPENSION CROSSMEMBER
10. LOW PROFILE MIDSHIP CROSSMEMBERS

Chassis Equipment

1. REAR JACK MTG PROV 12.5"X15.25" (12 HOLE) WITH BRACKETS
2. (2) EXTRUDED SYSTEM HOLDERS WITH LIDS - PLASTIC
3. STANDARD FRONT CHASSIS CLIPPING
4. STANDARD AFT CHASSIS CLIPPING

Fuel Tanks

1. 150 GAL / 567 LITER RECTANGULAR STEEL FUEL TANK - BETWEEN RAILS
2. PETROLEUM DIESEL FUEL
3. 2" DROP BETWEEN RAILS FUEL TANK FORWARD OF REAR AXLE UPPER FILL LOCATION ONLY
4. LH AND RH SIDEFILL FUEL TANK CAPS
5. DUAL FUEL FILL HOSES
6. FUEL FILLER NECK WITH 16 DEGREE FLANGE
7. ALLIANCE FUEL FILTER/WATER SEPARATOR WITH PRIMER PUMP AND INDICATOR LIGHT

Tires

1. MICHELIN XZA2 ENERGY 295/80R22.5 16 PLY RADIAL TIRES

Wheels

1. ACCURIDE 40008 22.5X8.25 10-HUB PILOT 10-HAND HD ALUMINUM DISC WHEELS
2. POLISHED FRONT WHEELS; OUTSIDE ONLY, WITH 'HALF MOON' BRIGHT WHEEL COVERS
3. POLISHED REAR WHEELS; OUTSIDE OF OUTER WHEELS ONLY, WITH BRIGHT WHEEL COVERS
4. POLISHED PUSHER/TAG WHEELS; OUTSIDE ONLY, WITH BRIGHT WHEEL COVERS
5. TR-546G VALVE STEMS, REAR ONLY

Unit Exterior

1. OPERATOR STATION (CONTROL SUPPORT)
2. SINGLE ELECTRIC HORN
3. IGNITION KEY ONLY
4. FRONT LAMP WIRING HARNESS
5. DAYTIME RUNNING LIGHTS

Vehicles interior operator and passenger compartment

1. 5/8" HEATER PLUMBING HOSE - TO FRONT OF CHASSIS
2. SANDEN COMPACT AIR CONDITIONER COMPRESSOR
3. TRW TILT/3.00" TELESCOPIC STEERING COLUMN WITH FOOT ACTUATED PEDAL
4. V.I.P. SMART 4-SPOKE 18 INCH (450MM) BLACK STEERING WHEEL WITH LEATHER WRAPPED RIM

Instruments & Controls

1. ADJUSTABLE SUSPENDED PEDALS, OFFSET LEFT
2. FOOT PEDAL SYSTEM WIRING AND CONTROL SWITCH
3. BLACK GAUGE BEZELS
4. BLACK FACED GAUGES (PANTONE HEXBLK C)
5. ABSOLUT GRAPHICS
6. WHITE GAUGE BACKLIGHTING
7. RED GAUGE POINTER
8. ENGLISH UNITS MAJOR SCALE
9. ODOMETER INTEGRAL WITH LIGHT BAR
10. FLAT INSTRUMENT GAUGE LENS
11. DRIVER MESSAGE CENTER WITH INTEGRAL LCD DISPLAY, DATA LINKED
12. 5" SPEEDOMETER
13. 5" TACHOMETER INTEGRAL WITH VOLT AND FUEL
14. 5 INCH PRIMARY AND SECONDARY AIR PRESSURE GAUGES WITH INTEGRAL COOLANT TEMPERATURE AND OIL PRESSURE GAUGES
15. MULTIPLEXED ENGINE OIL PRESSURE GAUGE CONTAINED IN MULTI-GAUGE
16. MULTIPLEXED ENGINE COOLANT TEMPERATURE GAUGE CONTAINED IN MULTI-GAUGE
17. 2 INCH REMOTE MOUNTED VOLTMETER
18. ELECTRIC FUEL GAUGE CONTAINED IN MULTI-GAUGE
19. 2 INCH TRANSMISSION OIL TEMPERATURE GAUGE
20. LOW AIR PRESSURE LIGHT AND BUZZER
21. 2" REMOTE MTD DEF GAUGE
22. AIR RESTRICTION INDICATOR SHIPPED LOOSE
23. CRUISE CONTROL - ELECTRONIC, CONTROLS IN STEERING WHEEL HORN PAD WITH HIGH IDLE FEATURE
24. J1939 WITH 9 PIN CONNECTORS IN OPERATOR STATION AND ENGINE COMPARTMENT
25. PROGRAMMABLE RPM
26. WASHER/WIPER WIRING PROVISION LOCATED OUTSIDE OPERATOR AND PASSENGERS COMPARTMENT
27. CARLING L-SRS MRKR LT/HDLT, DMR & FOG LAMP SWS W/GRN BCKLTG W/3 POS MTG FRM
28. ONE VALVE PARKING BRAKE SYSTEM
29. SELF CANCELING TURN SIGNAL SWITCH WITH DIMMER IN HANDLE
30. TURN SIGNAL FLASHER INTEGRAL W/HEADLAMP CONTROL MODULE

Chassis Warranty

1. CHASSIS WARRANTY (LESS DRIVETRAIN) TO INCLUDE – THREE (3) YEARS, 50,000 MILES

Certification / Compliance

1. U.S. FMVSS CERTIFICATION

Body Specifications

- Body shall be custom manufactured and equivalent to or better than the following specifications. Body framework shall be welded aluminum designed to be durable, and adequately reinforced at all points where road shock and vibration stress concentration occurs. Raised rail chassis provides large, pass thru under floor storage compartments.
- Sidewall horizontal and vertical structure to be 1.5" x 1.5" x .100" aluminum tubing. All horizontal and vertical structures shall be welded at top and bottom. All vertical tubing shall be spaced at 24" centers. Window post and door post locations shall be double structure for added support. Insulation shall be 1.5" polystyrene foam core. Interior skin shall be 3.6MM luan plus 1/2" plywood. The exterior surface shall be 3.6MM luan with fiberglass gel-coated skin.
- Rear vertical wall shall be 1-1/2" x 1-1/2" x .125" minimum aluminum tubing and 1-1/2" x 1-1/2" x .125" minimum aluminum angle. All horizontal and vertical structures shall be welded top and bottom. All vertical tubing shall be spaced at 24" centers. An engine service access door shall be provided with a rough opening of 31" x 58". Insulation shall be 1-1/2" polystyrene foam core.
- Front vertical wall below windshield shall be 1-1/2" x 1-1/2" x .125" minimum steel tubing and 1-1/2" x 1-1/2" x .125" minimum steel angle. Welded horizontal tubing shall be placed at top and bottom. Insulation shall be 1-1/2" polystyrene foam core. Exterior surface shall be 3/4" plywood covered with .040" aluminum sheet. Standard fastening and lamination process to be used. A two-piece molded fiberglass cap with service access door shall be installed to provide a finished front.
- Exterior panels shall be gel-coated smooth one piece fiberglass. Fiberglass shall go through a lamination procedure that will include a vacuum bonding process. Exterior side paneling shall be designed to contribute to the overall structural integrity of the coach body.
- Roof shall be constructed of a combination of 1" x 1-1/2" and 1-1/2" x 1-1/2", .100" thick minimum aluminum tubing with a truss system to allow contoured exterior roof and flat interior ceiling. Welded horizontal tubing top and bottom, with all vertical tubing, shall be spaced at 24" centers. Insulation used shall be high-density foam, custom cut to roof contour. Interior and exterior roof surface shall be covered with 3.6MM luan laminated in a vacuum bond process.
- Exterior roof surface shall be one-piece aluminum, reflective white in color, run the full length of the roof and provide sufficient strength for walking. An NFPA 0.125" aluminum tread plate walkway shall be supplied to provide safe walk areas on roof.
- Floor shall be constructed of 2" x 2" x 1/16" steel tubing. Welded longitudinal tubing shall be placed at top and bottom and spaced at 16" centers. Insulation shall be 2" polystyrene foam core. Bottom (exterior) surface shall be covered with 3.6 mm luan and .008" galvanized steel. All of the above shall go through a lamination procedure that will include a vacuum bonding process. Upper floor shall provide a cutout for engine service access panel.
- Skirting shall be constructed of .100" aluminum sheet panels. Panels shall be cut to size for minimum overlap and joints. Panels shall be placed and secured with the necessary fasteners and support hardware. Panel shall be primed and painted with a pre-selected finish.
- Under floor storage area shall be fabricated of 1-1/2" x 1-1/2" x 1/8" aluminum box tubing. Large pass thru storage compartments shall be supplied where possible. Compartment doors shall have a heavy-duty stainless steel continuous hinge at the top, positive door latch with lock at the bottom, centered. Each door shall have a weather resistant one-piece continuous neoprene seal. Gas struts shall hold up storage compartment doors provided. All service panel doorframes shall be 1-1/2" x 1-1/2" x .125" aluminum box tubing with welded corners. Inner frame supports shall be welded in place.
- Velvac bus style exterior mirrors shall be heated with switch control on dashboard.
- All LED slim line brake/tail lights shall be installed. Whelen M6 Series LED back-up lights with black flanges shall be integrated into rear light package.
- LED rectangular headlights with low/high beam settings shall be integrated into front cap. Fog lights shall also be integrated.
- Clearance/side marker lighting shall be installed to meet/exceed Federal requirements. Headlights, tail lights and clearance/side marker lights shall automatically illuminate with the ignition "ON" switch, but shall be capable of operating from a manual switch without the ignition switch being activated.

- Two-speed, intermittent electric windshield wipers/washers shall be installed. System shall include 24" blades and a 70 oz. washer fluid bottle cap with electric pump.
- Body shall have a tinted safety glass windshield with driver and passenger sun visors.
- A full width rear bumper, painted to match body, shall be installed.
- A reinforced, energy absorbing, impact resistant front bumper with contoured corners shall be installed. Bumper shall be painted to match body.
- The entire underside of the vehicle shall be undercoated.
- Rear mud flaps shall be installed on rear wheels.
- Body shall carry a warranty of ten (10) years. No exceptions.
- Interior construction, materials, and labor shall carry a warranty of two (2) years. No exceptions.

VEHICLES OPERATOR /PASSENGER COMPARTMENT

- Driver and Passenger seat shall be bucket style with armrests, headrest, recline, multi-adjustable, manual adjustable lumbar and three point shoulder and lap seat belt with retractors. Seats shall swivel 180-degrees and have slide pedestal control. Driver area will have a sleeping accommodation for one person and will have a bulkhead with pocket door.
- One (1) passenger side entrance door shall be installed with stepwell into operator's compartment. This stepwell shall have a flip-down cover while vehicle is in transit.
- A sign on dashboard with vehicle height shall be installed.
- A payload sticker shall be installed with vehicle axle loads and available axle payload, as built.
- A Final Stage Vehicle Certification and Altered Vehicle Certification as required by Federal Motor Vehicle Safety Standards (FMVSS) 49 CFR Part 567.5 and 567.7 shall be installed.
- Two (2) defrost fans shall be installed for defrosting windshield.
- Vehicle operator/passenger compartment side windows shall include a snap-on vinyl black-out curtain.
- Windshield shall include an electric visor with sun shade and black-out shade controllable from driver location.

Slide-Out Room(S)

- Four (4) slide-out rooms shall be installed on the vehicle and will be as large as possible. Slide outs will be floor flush if available. Slide-out rooms shall be fabricated from aluminum.
- Each slide-out to have awning that automatically extends and retracts over top of room to protect from weather and debris.
- Slide-Out room in/out functions shall be controlled through the multiplexed touch screen control system. System shall allow user to deploy slide-outs through the permanent mount touch screens or provided iPads.
- A notification light and audible alarm shall sound when ignition is switched to the "ON" position with slide-outs deployed.
- Each slide out room will have an emergency manual retraction system.

Paint and Graphics

- The final finishing of the vehicle shall be to commercial truck standards.
- All paint applications shall conform to the paint manufacturer's requirements and recommendations.
- Entire apparatus shall be painted white (customer to provide paint code at pre-construction conference). This includes body, compartments, slide-outs, antenna rail system, awning boxes, nycoil bucket, etc.
- A graphics package shall be designed and installed by selected vendor. The TBI team will provide basic design and logo requirements. Graphics package will allow up to twelve (12) custom logos and three-hundred (300) custom letters and custom stripping. Graphics package shall be reflective.

Awning

- Full Length lateral arm awning installed on the passenger side roof of vehicle.
- Awning fabric color and graphics to be determined at pre-construction conference.

- Awning shall be controlled through fixed touch screen, tablet or provided remote control.
- Awning shall be installed with custom manufactured corner fairings to provide an integrated look with the coach body.

Roof Ladder

- An aluminum ladder shall be installed on rear cap of coach. Ladder shall be powder coated to match body color.

Leveling and Stabilizing System

- An HWH hydraulic leveling and stabilizing system shall be installed. System shall be rated for the appropriate weight of the completed vehicle.
- Jack system shall be power up/power down.
- Leveling system pump shall operate the jack system and all slide-out rooms.
- A safety interlock shall exist when jacks are deployed
- Four (4) high density polypropylene, injection molded yellow colored Super Dolly Pads, or equivalent, shall be supplied with leveling jacks. Pads shall measure 15" x 17" x 1" thick with a grab strap on one side.

Walls, Ceiling, and Floor

- The entire body, sides, ends and roof including doors, shall be completely insulated to enhance the performance of the heating and cooling systems.
- The insulation shall be non-settling type, vermin-proof, mildew-proof, fire retardant, non-toxic and non-hygroscopic.
- Interior body side posts shall be covered with 3/4" plywood sub wall.
- Sub wall shall be covered with carpeting material below countertop height, and whiteboard dry erase laminate above in the Intel & Briefing Rooms. Galley and Driver's room wall material will be decided at pre build conference.
- Interior roof supports shall be covered with 1/2" plywood.
- Ceiling shall be ducted for even distribution of the air conditioning system. Ceiling shall be covered with wrapped vinyl panels (including ducted portion).
- Three (3) 30" Satin Stainless laminate, or equivalent, covered pocket doors installed on heavy-duty aluminum track with two (2) four-wheel roller trucks shall be installed. Pocket doors shall have recessed handles.
- All bulkheads shall be covered with Wilson Art Satin Stainless laminate, or equivalent, with rounded aluminum edge extrusion.
- 5/8" exterior grade tongue and groove plywood shall be installed for sub floor.
- Floor shall be covered with Lonseal Loncoin II Fleckstone, or equivalent, non-skid commercial grade PVC flooring.

Cabinets

- Custom overhead and base cabinetry shall be provided in the vehicle.
- Custom fabricated aluminum cabinets. Cabinet Specifications:
 - *Base cabinets constructed of 0.080" powder coated aluminum with anodized aluminum frames.
 - *Base cabinet doors are double shell, formed from a single sheet of 0.080" aluminum, with a 0.040" aluminum door back attached.
 - *Overhead cabinets constructed of 0.064" powder coated aluminum with anodized aluminum frames.
 - *Overhead cabinet doors are double shell, formed from a single sheet of 0.064" aluminum, with a 0.040" aluminum door back attached.
 - *Overhead cabinet doors swing up on a full-length aluminum hinge, and are held open with two (2) gas shock lift supports.
 - Overhead cabinet doors shall have dry erase writing surfaces.

- LED lighting shall be installed below overhead cabinets to evenly light workspace areas. Lighting shall be controlled through the touch screen and tablet electrical system.

Countertops and Table

- All countertops and work surfaces shall be constructed from solid surface material over subsurface. Solid surface tabletop color and edge pattern shall be determined at pre-construction conference.
- Conference tables will be removable and storable in vehicle.

Seating

- Fourteen (14) Haworth Very Desk, or equivalent, chairs will be placed in Intel (6) & Briefing (8) rooms.

Galley

- One (1) 1,000 watt microwave shall be installed.
- One (1) Black and Decker SpaceMaker™ Under-the-Cabinet 12 Cup, or equivalent, coffee maker shall be installed.
- One (1) Norcold DE-0041 12Vdc/120Vac refrigerator, or equivalent, shall be installed.
- No Restroom, lavatory, or plumbing system will be installed.
- In the galley area, a Flojet BW5000a, or equivalent, bottled water dispenser pump will be installed under counter.
- A small sink system, which includes a water dispenser, will drain to a 5 gallon water bottle under the counter.
- A full size storage closet with movable shelving.
- Counter top will have 120 volt power, phone, network, and HDMI A/V matrix input/output connections.
- One (1) angled broom and dust pan shall be mounted.

Briefing Room – The Larger of The Two Main Rooms

- Two Slide outs, with full length bench seats and underneath storage drawers, two (2) 47" HDTV mounted on curb-side, one (1) 47" HDTV mounted on street-side front, one 50" HDTV mounted on street-side rear with SmartBoard system.
- At each end of bench seats there will be storable desk, 120 volt power, phone, network, and HDMI A/V matrix input/output connections. The street-side rear area will be considered a permanent workstation with pc and 2nd monitor mounted on slide out wall with 120 volt power, network, phone, and HDMI A/V matrix system input/output connections. Computer and monitor specs are located in Computer and Printer Section.
- The conference table will be removable and storable on board. Floor sockets, (if used) will be flush when not in use.
- This room will contain two (2) Motorola APX 8500 remote heads (05), speakers, and microphones, (radios mounted another location). One (1) Weather Alert radio with S.A.M.E. function will be mounted.
- Additional heating will be added to supplement roof units.
- Eight (8) Haworth Very Desk, or equivalent, chairs with travel restraints.

Intel Room – The Smaller of The Two Main Rooms

- Two Slide outs, curb-side will have two (2) permanent workstation with pc and 2nd monitor (computer and monitor specs located in Computer and Printer Section) mounted on slide out wall with each having 120 volt power, network, phone, and HDMI A/V matrix system input/output connections, with overhead storage cabinets, 120 volt power, network, phone, and HDMI A/V matrix system input/output connections, independently controlled lighting, supplement heat at baseboard. Street-side slide out will have a dinette "booth style" table and benches with underneath storage drawers, 120 volt power, Network, phone, and HDMI A/V matrix system input/output connections, supplement heat at base board, at least four (4) 27" HDTV monitors, overhead cabinets, independently controlled lighting.

- Rear wall will contain two (2) more permanent analyst workstations, same specs as the curb-side slide out workstations.
- The conference table will be removable and storable on board. Floor sockets, (if used) will be flush when not in use.
- This room will contain two (2) Motorola APX 8500 remote heads (05), speakers, and microphones, (radios mounted in another location). One (1) Weather Alert radio with S.A.M.E. function will be mounted.
- Additional heating will be added to supplement roof units.
- Six (6) Haworth Very Desk, or equivalent, chairs with travel restraints.
- Intel Room appliances: One (1) Norcold DE-0041, or equivalent, one (1) Keurig 2.0, or equivalent.

Driver's Room – Separated From Conference Room With Bulkhead and Pocket Door

- This room will serve as the work/sleeping area for the Command Post staff during extended deployments and/or 24 hour operations. HVAC, lighting, and A/V systems will be independently controlled.
- Work station computer and 2nd monitor mounted on bulkhead wall with counter top. Computer and monitor specs located in Computer and Printer Section. 120 volt power, network, phone, and HDMI A/V matrix system input/output connections.
- Opposite bulkhead will have at least one 27" HDTV connected to the A/V matrix system.
- One (1) HDTV mounted at roof line between overhead storage cabinets connected to the A/V matrix system.
- This room will contain two (2) Motorola APX 8500 remote heads (05), speakers, and microphones, (radios mounted in another location). This station will use the 2nd head function of the two 8500 radios used for one of the conference rooms.
- One Uniden 980 SSB citizens band radio and Uniden wireless microphone, mounted at driver's station.
- One Gun Vault SV500 Speed Vault mounted near driver's seat, exact location TBD at pre build conference.

Closet

Vehicle will have one lockable closet / storage cabinet with adjustable shelves capable of hanging jackets and storing other non-secure equipment with a Simplex 3000 – Narrow Stile, or equivalent, push button/keyed lock.

HVAC System

- Install one (1) Fan-tastic Vent model 4000R 3-speed reversible 12" power roof ventilator, or equivalent. A white roof vent cover shall also be installed.
- Install at least two (2) 12,000-16,000 btu/hr direct discharge, 12Vdc powered, diesel-fired furnaces. Exhaust shall be routed to the street side and connect to a stainless steel exhaust plate in body skirting. A "CAUTION HOT" label shall be placed above each plate. Each heater shall be zoned and allow temperature settings through the touch screen and tablet devices.
- Install four (4) 13,500 btu rooftop air conditioners. Roof ducts shall evenly distribute cool air throughout the vehicle and into electronics racks. Air conditioning condensation drains shall be plumbed behind the wall with tubing to the ground of the vehicle. Air conditioners shall also include 5,600 BTU heat strip.
- Room specific heating/cooling adjustments shall be made through the multiplexed touch screen control modules (and iPads). System shall automatically select heating/cooling source based on the temperature set by end user.
- One (1) 25-KW Diesel generator mounted in custom fabricated all aluminum compartment. Generator shall include air bag mounts.
- Furnish and install a multiplexed vehicle automation system incorporated into a common touch screen(s) that is custom programmed to monitor and control onboard. The automation system software must allow simultaneous distribution of information to multiple onboard control/monitoring stations and the software must be updateable and configurable as required.

Automation system includes:

- Two (2) 10" LCD touch screen with custom graphics for control and monitoring
- Two (2) iPad tablets
- Two (2) touch pad with custom graphics for local control of awning and scene lighting
- AC power distribution control and monitoring for the generator with power management
- DC power distribution control and monitoring with I/O channels and 3 battery banks
- Manual or automatic generator control
- HVAC and temperature control in each section of the truck

- Lighting control in each section of the vehicle and exterior

Safety interlocks and warnings. The automation system touch screen(s) will automatically display a warning message and give an audible alert when the ignition switch is turned to the on position with an item deployed. In order to easily identify the item causing the alert condition, the screen(s) must display a list of all items that are deployed, i.e. mast, slide out, leveling jacks, awning, etc.

- Maringo, or equivalent, 100A-125/250Vac waterproof shore power inlet, 50-ft. 100A-125/250Vac shore power cord and 6-ft. 50A-125/250Vac pigtail.
- An LED indicator light shall be located near shore power connection.
- Specification grade 20A-125Vac duplex receptacles with built-in, dual USB charging ports shall be installed as needed. Outlet locations shall be determined at pre-construction conference.
- Eight (8) Specification grade 20A-125Vac exterior GFCI duplex receptacles with weatherproof PVC covers, locations TBD.
- A 75' 14/3 AWG Conductor Extension Cord 3UY36 shall be installed on a Hannay C16-10-11, or equivalent, Portable Storage Reel. Reel shall be housed in exterior compartment. This will be used to provide 120 volt power to external systems.
- A wire chase wire management raceway system shall be installed throughout the vehicle. System shall feature an extruded 6063-T5 aluminum alloy material that resists rust, corrosion and fading. Aluminum shall have a satin anodized finish.
- Two APC Smart-UPS, 3,000VA rack mount, model SMX3000LV, or equivalent, shall be installed. UPS shall power eight (8) interior RED 20-125VAC duplex receptacles with stainless steel wall plates for electronics equipment. Second UPS shall power the communications positions.
- All 120/240Vac main wiring shall be stranded THHN wire and run in non-metallic Carlon Carflex, or equivalent, liquid tight conduit.
- All 120/240Vac branch circuit wiring shall be stranded THHN wire (AWG 12 minimum) and run in non-metallic Carlon Carflex liquid tight, or equivalent, and Carlon Flex-Plus blue ENT conduit, or equivalent.
- All electrical circuits and appliances shall conform to applicable national electrical codes.
- An aluminum countertop box shall be installed at each workstation. Countertop box shall house all receptacles, network jack, phone jack, HDMI input and any other connection associated with the workstation. Top panel of box shall have engraved labels indicating function of connection.

12V DC Electrical System

- In addition to the chassis batteries, six (6) deep-cycle batteries shall be installed underbody in a slide out weather resistant compartment. These batteries shall be utilized to start the generator and provide battery power to on-board systems.
- Three (3) electronic converter/chargers, 80 amp minimum output each installed underbody in weather resistant climate controlled compartment.
- A battery boost switch shall be provided in the operator's compartment and to be easily accessible to the operator. This is to tie the "chassis" and "auxiliary" battery systems together in case of low voltage.

- 2-gauge minimum copper stranded battery cable shall be used for 12Vdc main supply lines. All cable runs shall be full length, no splices. All cable terminals shall be staked and soldered. All cable shall be enclosed in convoluted polyethylene tubing and the ends of the cable shall be sealed with color-coded shrink-wrap identifying the function of the cable.
- All added electrical circuits shall be protected from over-current by resettable circuit breakers appropriately rated for the load. Only circuit breakers shall be used in the installation of added electrical wiring (plug type fuses are unacceptable).
- Circuit breaker functions shall be identified by engraved or printed labels.
- All added wiring for load runs shall be AWG 8, 10, 12, 14 and 18 and shall conform to MIL-W-16878F.
- Wire terminals for added circuits must conform to MIL-T-7928. Terminals shall be insulated, insulation grip, TYPE II, Class 2 and shall be crimped with tooling recommended by the terminal manufacturer.
- All wiring shall be numbered or lettered on 6" centers minimum.
- Wiring shall be protected from chafing and abrasion with convoluted polyethylene tubing (wire loom) as required.
- Where wire passes through sheet metal, bulkheads and structural supports, plastic grommets shall be used to protect both wiring and wire looms.
- All wiring shall be supported on 12" centers.
- 12VDC power outlets shall be installed, as needed, on the interior and exterior of vehicle.

Interior Lighting

- Ceiling lights shall be, Orion 6" LED, or equivalent, white with polished bezels. Under-cabinet LED lighting is to be provided in vehicle where needed
- Lighting shall be controlled through the electrical control touch screens and provide individual room adjustment with dimming capabilities.

Exterior Lighting and Equipment

- A class III trailer hitch shall be installed with Bargman 7 wiring and electric brake controller.
- Six (6) Whelen 900 Series LED scene lights, or equivalent, shall be installed. Two (2) shall be installed on each side and two (2) on the rear. A black, weatherproof flange shall be installed on each light.
- Ten (10) Whelen Perimeter Enhancement Lights, or equivalent, shall be installed. Lights shall be steady white.
- One (1) Whelen 600 Series LED scene light, or equivalent, shall be installed near the entrance/exit door.
- One (1) Command Light, model #CL602A, or equivalent, shall be installed on roof of vehicle. Roof light shall bolt to a custom support frame that will be welded to the roof of the truck. Shall include:
 - 6x150 watt LED lamps
 - Back Light Option
 - Auto Park
 - Handheld Controller w/ 15' umbilical cord
 - 50' power cable
 - 50' control cable
 - Ignition interlock controlled through multiplex system
- White LED lighting shall be installed in all exterior compartments. Lighting shall switch on automatically when the compartment is opened.
- Two (2) LED lights shall be installed at each slide-out end. The lights flash to notify the slide-out positioning to anyone around the vehicle.
- One (1) Whelen TAM85 Low Profile Traffic Advisor with eight 500 series TIR6 Super-LED lamps, or equivalent, shall be installed. Traffic Advisor shall be located on rear of vehicle.
- Four (4) Whelen TIR3 series Super-LED lightheads, or equivalent, with internal flashers, Blue LED's with clear outer lens, model RSR03ZCR.

- Eight (8) Whelen M6 series Linear Super-LED lightheads, or equivalent, with internal flashers, Blue LED's with clear outer lens, model M6RC.
- Eight (8) Whelen M9 series Linear Super-LED lightheads, or equivalent, with internal flashers, Blue LED's with clear outer lens, model M9RC.
- A Whelen 295HFSA5 remote siren, or equivalent, shall be installed with a Whelen SA315P grille mounted speaker, or equivalent, Siren control shall also control all emergency light functions. Positions to be as follows:
 1. Rear Upper
 2. All rear, All upper
 3. All
- One (1) green, Whelen LED, or equivalent, strobe light shall be installed on antenna roof rail system.
- Two (2) Kwik-Raze model 800 Tripod LED lights, or equivalent, mounted on rear.
- One wireless remote controlled LED spotlight mounted on roof over operator's compartment.

Audio/Video

- One (1) bumper view back-up camera and One (1) Horizontal rear view camera shall be installed. Dash multiplex touch screen shall provide the video output for rear and side view (blind spot) cameras.
- Six (6) Samsung 27", LED, HDTV, or equivalent, monitors shall be installed throughout the vehicle.
- Three (3) Samsung 47", LED, Smart, HDTV, or equivalent, monitors shall be installed throughout the vehicle.
- One (1) Samsung 50", LED, Smart, HDTV, or equivalent, with Smart Board will be installed in Briefing Room.
- One (1) LED, Smart, HDTV monitor, as large as possible, shall be positioned in exterior monitor compartment. Exterior monitor compartment shall be constructed from 0.125" aluminum with all welded seams and hinged at the top. Compartment shall include gas charged lift supports and locking latch. There shall be a full width fold out work surface in the compartment. Monitor shall be an output for the video switch.
- One (1) Samsung SRD-880D DVR, or equivalent, shall be installed to record video inputs. DVR shall be installed in electronics rack and will be an input for the video switch.
- One (1) Samsung BD-J7500 Blu-Ray Player, or equivalent, shall be installed in electronics rack and will be an input for the video switch.
- One (1) Trav'ler SK-SWM3, or equivalent, Slimline Mobile satellite TV antenna system shall be installed. Two (2) DIRECTV H24 HD receivers with IR remote controls shall be installed and be an input for the video switch. TBI has existing DirectTV service.
- One (1) AVL 1.2 Meter Dish w/ Buc, LNB, Modem. System must be compatible with TBI's current service provider: Mobil Satellite Technologies.
- One (1) Multi-Camera surveillance system shall be installed. Includes:
 - 1- Multi View Multiplexer with looping outputs
 - 1- Day/Night Color camera, rear view
 - 1- Day/Night Color camera, front view
 - 1- Day/Night Color camera, left side view
 - 1- Day/Night Color camera, right side view
 - 2- Day/Night Color camera, one over each entry door with a monitor inside each door.
- One (1) King Control Jack Digital HDTV Antenna, or equivalent, with SureLock DTV Signal Meter shall be installed. OTA TV signal shall be routed to all Samsung TVs (not workstation monitors).
- One (1) HDMI inlet shall be installed at each rear workstation location interfaced to A/V matrix system.
- One (1) Extron Modular Digital Matrix, or equivalent, switch shall be installed in the electronics rack. This switch provides digital signal routing for all inputs and outputs. One day of training on system will be included.
- Extron switch shall have ability to switch video inputs at electronics rack. Vendor shall also supply system touchpads at each monitor location for video switching.

- Audio/video switching will be an extremely important aspect of the vehicle. Vendor is to provide a narrative on the equipment, cabling, programming, and labeling for their proposed solution.
- All RF cable for DSS antenna systems shall be Belden #9116 series 6 broadband coaxial cable. All other video cabling shall be Belden RG-6 precision video cable.

Mast and Mast Mounted Equipment

- One (1) Will-Burt 42' Heavy-Duty Non-Locking mast, or equivalent, shall be installed on rear of vehicle. Mast shall include all mounting brackets and air compressor for operation.
 - Mast shall include a nycoil for running the camera wiring. Aluminum, custom manufactured nycoil bucket and mast guard shall encompass the assembly. Nycoil bucket and mast guard shall be painted to match the body.
 - A weatherproof box shall house mast up/down controls.
 - A mast look-up light shall be installed at top of mast for safe, night time operation.
 - One (1) AXIS Q6155E Camera and One (1) AXIS Q6128E shall be installed on the mast. Both cameras will be controllable and viewable from Briefing and Intel rooms, routed through A/V matrix system as well as the DVR system.
 - A custom manufactured antenna plate shall be installed at top of the mast to house cameras and priority antennas to include: Two (2) Motorola APX Tri-band antennas, two (2) Panorama 5 Cable cellular/GPS/WIFI antennas.
 - Four (4) antenna cables with connections for the APX 8500 will terminate at electronics rack. Two antenna leads will come from the mast, two will come from the roof mounted antenna raceway system.
- *NOTE: if needed, antennas could be mounted on.

Radios

- Primary 12Vdc power leads for communications radios shall be minimum 2-gauge copper stranded wire with soldered crimp-on end connectors to connect to Motorola APX 8500 radios (gauge based on radio requirements).
- Radio wiring shall be run in an enclosed, rooftop, aluminum raceway system. Raceway system shall have a weatherproof box for routing cabling into electronics rack. Raceway system shall be utilized to prevent roof penetrations. Vendor shall provide 48' of raceway around the roof.
- LMR 400 antenna cable shall be routed to radio transceiver location in Carlon Carflex ENT conduit, or equivalent.
- 12Vdc power wire shall be routed to radio transceiver location.
- Radio cabling shall be run to a BNC patch panel located in the electronics rack.
- Four (4) TBI supplied Motorola APX8500 Tri-Band radios shall be installed.
- Install six (6) customer supplied microphones, heads, and speaker. Remote control heads (05), mics, and speakers will be installed as noted above in Briefing, Intel, and Driver's room.

Computers and Printers

- Install six (6) HP computers (specs below) located in Intel Room (4), Briefing room (1), and Driver's room (1). All computers will be 23.8" all-in-one style, mounted with matching 23.8" monitor, making a dual monitor system, at each workstation. Workstations will have wireless key board and mouse. Vendor will install mounts specific for each workstation. All workstations will have 120 volt power, network, and HDMI A/V matrix system input/output connections. All model numbers below are Hewlett Packard:

- *1 Y8C79AV CTO ELITEONE 800 G3 23.8 T AIO PC
- *2 Z0M96AV CTO WIN 10 PRO 64 US ENGLISH LOCALIZATION
- *3 W6N52AV CTO ENERGY STAR CERTIFIED LABEL
- *4 Z8T90AV CTO INTEL 7700 7GEN CORE I7-4C
- *5 Z0N78AV CTO 16GB (1x16GB) DDR4-2400 SODIMM
- *6 Z0P01AV CTO SSD Turbo Drive G2 512GB NVMe TLC
- *7 Z0P08AV CTO ODD 9.5 DVDWR 800 G3
- *8 Z0P34AV CTO KBD MUS WL BUSSLIM KEYBOARD & MOUSE US ENGLISH

LOCALIZATION

- *11 Z0N34AV CTO FIXED 2MP HD LOW-LIGHT WEBCAM W
- *12 Z0P21AV CTO 3/3/3 AIO WARRANTY US ENGLISH LOCALIZATION
- *13 Z0P36AV CTO ELITEONE 800 G3 AIO T CKIT US ENGLISH LOCALIZATION
- *14 1CP84AV CTO INTEL KBL CORE I7 LABEL VPRO
- *15 1AR38AV CTO CEL CATB G1 AIO 23.8 NT LABEL
- *16 N3H14AA#ABA P240va 23.8" Monitor
- A network copy/scan/fax printer will be installed, location TBD. Model:
B3Q11A#BGJ HP LaserJet M277DW Laser Multifunction Printer - Color - Plain Paper Print - Desktop - Copier/Fax/Printer/Scanner - 19 ppm Mono/19 ppm Color Print - 600 x 600 dpi Print - Automatic Duplex Print - 19 cpm Mono/19 cpm Color Copy - 1 x Input Tray 150 Sheet, 1 x Multipurpose Tray 1 Sheet, 1 x Output Tray 100 Sheet, 1 x Automatic Document Feeder 50 Sheet - 3" Touchscreen - 1200 dpi Optical Scan - 151 sheets Input - Gigabit Ethernet - Wireless LAN - USB LASER P/S/C/F ENET USB

Voice and Data

- One (1) Vendor supplied VOIP telephone system with four (4) lines, intercom function, transfer function, five (5) desk phones, and two (2) cordless handsets. VOIP phone system must operate on Cellular or Satellite data service.
- Eight (8) RJ45 jacks with CAT6 cabling shall be installed around the vehicle and integrated into phone system.
- Two (2) Janus Remote Communications EVDO910PS v3.0 cellular voice devices, or equivalent, shall be installed in electronics rack and integrated with phone system.
- Two (2) Cradlepoint AER3100LP6 router, Rack Mount with Additional MC400L2 Cat 3 LTE modem (100/50 Mbps) for Band 14 LTE public safety/FirstNet
- One (1) 48 port Cisco Catalyst PoE, 300 watt switch.
- Forty eight (48) RJ45 jacks with CAT6 cabling shall be installed around the vehicle and terminated at CAT6 rackmount patch panel. CAT 6 patch cables shall be provided to connect thru from patch panel to network switches. Network jack locations shall be determined at pre-construction conference.
- One (1) Cast Products EB00013-1 cast aluminum weatherproof input box, or equivalent, shall be installed to house phone, coax and data connections as needed. Box shall include a PVC pass through for cabling into the vehicle.
- One (1) Bogen TPU-15 paging amplifier, or equivalent, with four (4) Whelen SA314B speakers, or equivalent, shall be installed. Two (2) speakers shall be installed on each side of the roof. One (1) Audio Technical wireless microphone, or equivalent, system shall be interfaced to paging amplifier.

Electronics Racks

- At least one, (1) Middle Atlantic MRK 3726 equipment racks, or equivalent, shall be installed in the vehicle. Racks shall be removable with a pin system and casters to access the back side. Rack power strips shall be powered through a UPS.
- Racks shall have a cooling system designed with exterior venting.

Miscellaneous Electronics

- An exterior keypad shall be located at each entrance door to unlock door. Main entry side door will have a electromagnetic door lock operated by keypad in addition to traditional keyed lock.
- One (1) Columbia Weather Systems Orion 510 9510-D-1 Weather Station, or equivalent, with Weather Master software, or equivalent, serial to Ethernet converter #8250, and weather display console shall be installed.
- One (1) Garmin RV 770 LMT-S GPS. GPS shall have a roof mounted antenna and shall be built into the dash.
- Two (2) Spectracom networked synchronized clocks, or equivalent, shall be installed at location TBD at pre-construction conference.

Miscellaneous

- Two (2) 5-pound dry chemical fire extinguishers shall be located at pre-construction conference.
- Four (4) First Alert 9-volt combination Carbon Monoxide and Smoke Alarms, or equivalent, shall be located at pre-construction conference.
- One (1) Medique 818M25P 25-Person Metal First Aid Kit, or equivalent, shall be shipped loose in exterior compartment.
- One (1) Automated External Defibrillator.
- All locks shall be keyed the same with exception of chassis door and chassis ignition.
- Four (4) Zico Wheel chock SA-44-E with holders, or equivalent, shall be installed.
- At time of delivery a manufacturer representative shall provide up to eight (8) hours of orientation on all manufacturer provided systems.
- Complete manual set on CD.
- As-built specifications with interior and exterior drawings as used for production of the vehicle.
- Chassis and body owner's manuals.
- 12V dc and 120Vac legends showing wire gauge, color, number and function.
- 12V dc high current wiring diagram.
- Warranty and Return Authorization procedures to include approved list of maintenance and service providers in the Nashville TN region.
- Chassis and generator maintenance and service logs.
- Battery maintenance information.

Delivery and Training

- At time of delivery to Tennessee Bureau of Investigation (TBI), a manufacturer representative shall provide a total of at least sixteen (16) hours of training and inspection. Training shall include:
 - Vehicle overview
 - Electrical systems training
 - Automatic start-up and shut-down procedures
 - Manual start-up and shut-down procedures
 - Audio/Video system operation
 - Training DVD provided with vehicle overview